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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/636,259B

DATE: 11/20/2002

TIME: 11:38:46

Input Set : A:\10738-44.ST25.txt

Output Set: N:\CRF4\11192002\I636259B.raw

~~17~~
~~1600~~

3 <110> APPLICANT: Small, Kersten
 4 Liggett, Stephen
 6 <120> TITLE OF INVENTION: Alpha-2A-Adrenergic Receptor Polymorphisms
 8 <130> FILE REFERENCE: 10738-44
 10 <140> CURRENT APPLICATION NUMBER: 09/636,259B
 11 <141> CURRENT FILING DATE: 2000-08-10
 13 <160> NUMBER OF SEQ ID NOS: 26
 15 <170> SOFTWARE: PatentIn version 3.1
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 1170
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Homo sapiens
 22 <400> SEQUENCE: 1

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25	ctgggtggcca	cgcctcgat	ccctttctcg	ctggccaaacg	aggcatggg	ctactggtag	120
27	ttcggcaagg	cttgggtgcga	gatctacctg	gcgcgtcgacg	tgctcttcgt	cacgtcgatcc	180
29	atcgtgcacc	tgtgcgccat	cagcctggac	cgctactgtt	ccatcacaca	ggccatcgag	240
31	tacaacacctga	agcgacgcgc	gcccgcatac	aaggccatca	tcatcaccgt	gtgggtcatc	300
33	tcggccgtca	tctccttccc	gcccgtcatac	tccatcgaga	agaaggccgg	cggccggccgc	360
35	ccgcagccgg	ccgagccgcg	ctgcgagatc	aacgaccaga	agtggtagt	catctcgatc	420
37	tgcattcggt	ccttcttcgc	tccctgcctc	atcatgatcc	tggctacgt	gcgcatactac	480
39	cagatcgcca	agcgtcgac	ccgcgtgcca	cccagccgc	gggggtccgg	cgcgtcgcc	540
41	gcgcgcgcgg	ggggcaccga	gcgcaggccc	aacggtctgg	gcctcgagcg	cagcgcgggc	600
43	ccggggggcg	cagaggccga	accgctgcac	acccagctca	acggggcccc	tggcgagccc	660
45	gcgcggccgc	ggccgcgcga	caccgacgcg	ctggacctgg	aggagagctc	gtctccgac	720
47	cacgcgcgac	ggcctccagg	gccccgcaga	cccgagcgcg	gtccccgggg	caaaggcaag	780
49	gcgcgcgcga	gccaggtgaa	gcccggcgac	agcctgcgc	ggcgcggggcc	ggggcgcacg	840
51	gggatcggtt	cgccggctgc	aggggccgggg	gaggagcgcg	tccgggtctgc	caaggcgtcg	900
53	cgctggcgcg	ggccgcgcgaa	ccgcgagaag	cgcttcacgt	tcgtgtctgg	cgtgtcatc	960
55	ggagtgttcg	tgggtgtctg	gttcccttc	ttcttcacat	acacgctcac	ggccgtcg	1020
57	tgctccgtgc	cacgcacgt	cttcaaattc	ttcttcgtgt	tcggctactg	caacagctcg	1080
59	ttgaacccgg	tcatctacac	catcttaaac	cacgatttcc	gccgcgcctt	caagaagatc	1140
61	ctctgtcggg	gggacaggaa	gcggatcggt				1170
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65	<211>	LENGTH:	1350				
66	<212>	TYPE:	DNA				
67	<213>	ORGANISM:	Homo sapiens				
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72	ggccggccccc	gggcaccccc	ttactccctg	caggtgacgc	tgacgctgg	gtgcctggcc	120
74	ggcctgctca	tgctgtcac	cgtgttcggc	aacgtgctcg	tcatcatcg	cgtgttcac	180
76	agccgcgcgc	tcaaggcgc	ccaaaacctc	ttcctggtgt	ctctggcctc	ggccgacatc	240
78	ctgggtggcca	cgcctcgat	ccctttctcg	ctggccaaac	aggcatggg	ctactggtag	300

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80	ttcggcaagg	cttggtgtcgaa	gatctacctg	gcgcgtcgacg	tgctttctg	cacgtcggtcc	360
82	atcgtgcacc	tgtgcgccat	cagcctggac	cgctactgg	ccatcacaca	ggccatcgag	420
84	tacaacctga	agcgacacgcc	gcgcgcgcattc	aaggccatca	tcatcacccgt	gtgggtcattc	480
86	tcggccgtca	tctccttccc	gccgctcattc	tccatcgaga	agaaggggcgg	cggccggcggc	540
88	ccgcagccgg	ccgagccgcg	ctgcgagatc	aacgaccaga	agtggtaacgt	catctcgatcg	600
90	tgcattcggt	ccttcttcgc	tccctgcctc	atcatgatcc	tggtctacgt	gcgcatactac	660
92	cagatcgcca	agcgtcgcac	ccgcgtgcca	cccagccgc	ggggtccgg	cgcgcgtcgcc	720
94	gcgcgcgcgg	ggggcaccga	gcgcaggccc	aagggtctgg	gccccgagcg	cagcgcgggc	780
96	ccggggggcg	cagaggccga	accgctgccc	acccagctca	acggcgcccc	tggcagagccc	840
98	gcgcgcgcgg	ggccgcgcga	caccgacgcg	ctggacctgg	aggagagctc	gtcttcgac	900
100	cacgcgcgagc	ggcctccagg	gccccgcaga	cccgagcg	gtccccgggg	caaaggcaag	960
102	gccccgagcg	gccaggtgaa	gccgggcgac	agcctgcgc	ggcgcgggccc	gggggcgacg	1020
104	gggatcgaaa	cgccggctgc	agggccgggg	gaggagcg	tcggggctgc	caaggcgatcg	1080
106	cgctggcgcg	ggcggcagaa	ccgcgagaag	cgcttcacgt	tcgtgctggc	cgtggtcatc	1140
108	ggagtgttcg	tggtgtgctg	gttccccttc	ttcttcacct	acacgctcac	ggccgtcg	1200
110	tgctccgtgc	cacgcacgct	cttcaaattc	ttcttctgg	tcggctactg	caacagctcg	1260
112	ttgaacccgg	tcatctacac	catcttcaac	cacgattcc	gccgcgcctt	caagaagatc	1320
114	ctctgtcg	gggacagggaa	gcggatcg				1350

117 <210> SEQ ID NO: 3

118 <211> LENGTH: 450

119 <212> TYPE: PRT

120 <213> ORGANISM: Homo sapiens

122 <400> SEQUENCE: 3

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125	1				5				10					15		
128	Glu	Ala	Pro	Gly	Gly	Gly	Ala	Arg	Ala	Thr	Pro	Tyr	Ser	Leu	Gln	Val
129						20			25					30		
132	Thr	Leu	Thr	Leu	Val	Cys	Leu	Ala	Gly	Leu	Leu	Met	Leu	Leu	Thr	Val
133						35			40					45		
136	Phe	Gly	Asn	Val	Leu	Val	Ile	Ile	Ala	Val	Phe	Thr	Ser	Arg	Ala	Leu
137						50			55					60		
140	Lys	Ala	Pro	Gln	Asn	Leu	Phe	Leu	Val	Ser	Leu	Ala	Ser	Ala	Asp	Ile
141	65					70				75				80		
144	Leu	Val	Ala	Thr	Leu	Val	Ile	Pro	Phe	Ser	Leu	Ala	Asn	Glu	Val	Met
145						85			90					95		
148	Gly	Tyr	Trp	Tyr	Phe	Gly	Lys	Ala	Trp	Cys	Glu	Ile	Tyr	Leu	Ala	Leu
149						100			105					110		
152	Asp	Val	Leu	Phe	Cys	Thr	Ser	Ser	Ile	Val	His	Leu	Cys	Ala	Ile	Ser
153						115			120					125		
156	Leu	Asp	Arg	Tyr	Trp	Ser	Ile	Thr	Gln	Ala	Ile	Glu	Tyr	Asn	Leu	Lys
157						130			135					140		
160	Arg	Thr	Pro	Arg	Arg	Ile	Lys	Ala	Ile	Ile	Ile	Thr	Val	Trp	Val	Ile
161	145					145			150					155		160
164	Ser	Ala	Val	Ile	Ser	Phe	Pro	Pro	Leu	Ile	Ser	Ile	Glu	Lys	Lys	Gly
165						165			165					170		175
168	Gly	Gly	Gly	Gly	Pro	Gln	Pro	Ala	Glu	Pro	Arg	Cys	Glu	Ile	Asn	Asp
169						180			180					185		190
172	Gln	Lys	Trp	Tyr	Val	Ile	Ser	Ser	Cys	Ile	Gly	Ser	Phe	Phe	Ala	Pro
173						195			200					205		

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176 Cys Leu Ile Met Ile Leu Val Tyr Val Arg Ile Tyr Gln Ile Ala Lys
 177 210 215 220
 180 Arg Arg Thr Arg Val Pro Pro Ser Arg Arg Gly Pro Asp Ala Val Ala
 181 225 230 235 240
 184 Ala Pro Pro Gly Gly Thr Glu Arg Arg Pro Asn Gly Leu Gly Pro Glu
 185 245 250 255
 188 Arg Ser Ala Gly Pro Gly Gly Ala Glu Ala Glu Pro Leu Pro Thr Gln
 189 260 265 270
 192 Leu Asn Gly Ala Pro Gly Glu Pro Ala Pro Ala Gly Pro Arg Asp Thr
 193 275 280 285
 196 Asp Ala Leu Asp Leu Glu Glu Ser Ser Ser Asp His Ala Glu Arg
 197 290 295 300
 200 Pro Pro Gly Pro Arg Arg Pro Glu Arg Gly Pro Arg Gly Lys Gly Lys
 201 305 310 315 320
 204 Ala Arg Ala Ser Gln Val Lys Pro Gly Asp Ser Leu Pro Arg Arg Gly
 205 325 330 335
 208 Pro Gly Ala Thr Gly Ile Gly Thr Pro Ala Ala Gly Pro Gly Glu Glu
 209 340 345 350
 212 Arg Val Gly Ala Ala Lys Ala Ser Arg Trp Arg Gly Arg Gln Asn Arg
 213 355 360 365
 216 Glu Lys Arg Phe Thr Phe Val Leu Ala Val Val Ile Gly Val Phe Val
 217 370 375 380
 220 Val Cys Trp Phe Pro Phe Phe Thr Tyr Thr Leu Thr Ala Val Gly
 221 385 390 395 400
 224 Cys Ser Val Pro Arg Thr Leu Phe Lys Phe Phe Phe Trp Phe Gly Tyr
 225 405 410 415
 228 Cys Asn Ser Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn His Asp
 229 420 425 430
 232 Phe Arg Arg Ala Phe Lys Lys Ile Leu Cys Arg Gly Asp Arg Lys Arg
 233 435 440 445
 236 Ile Val
 237 450
 240 <210> SEQ ID NO: 4
 241 <211> LENGTH: 450
 242 <212> TYPE: PRT
 243 <213> ORGANISM: Homo sapiens
 245 <400> SEQUENCE: 4
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 248 1 5 10 15
 251 Glu Ala Pro Gly Gly Ala Arg Ala Thr Pro Tyr Ser Leu Gln Val
 252 20 25 30
 255 Thr Leu Thr Leu Val Cys Leu Ala Gly Leu Leu Met Leu Leu Thr Val
 256 35 40 45
 259 Phe Gly Asn Val Leu Val Ile Ile Ala Val Phe Thr Ser Arg Ala Leu
 260 50 55 60
 263 Lys Ala Pro Gln Asn Leu Phe Leu Val Ser Leu Ala Ser Ala Asp Ile
 264 65 70 75 80
 267 Leu Val Ala Thr Leu Val Ile Pro Phe Ser Leu Ala Asn Glu Val Met
 268 85 90 95

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271 Gly Tyr Trp Tyr Phe Gly Lys Ala Trp Cys Glu Ile Tyr Leu Ala Leu
 272 100 105 110
 275 Asp Val Leu Phe Cys Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser
 276 115 120 125
 279 Leu Asp Arg Tyr Trp Ser Ile Thr Gln Ala Ile Glu Tyr Asn Leu Lys
 280 130 135 140
 283 Arg Thr Pro Arg Arg Ile Lys Ala Ile Ile Thr Val Trp Val Ile
 284 145 150 155 160
 287 Ser Ala Val Ile Ser Phe Pro Pro Leu Ile Ser Ile Glu Lys Lys Gly
 288 165 170 175
 291 Gly Gly Gly Pro Gln Pro Ala Glu Pro Arg Cys Glu Ile Asn Asp
 292 180 185 190
 295 Gln Lys Trp Tyr Val Ile Ser Ser Cys Ile Gly Ser Phe Phe Ala Pro
 296 195 200 205
 299 Cys Leu Ile Met Ile Leu Val Tyr Val Arg Ile Tyr Gln Ile Ala Lys
 300 210 215 220
 303 Arg Arg Thr Arg Val Pro Pro Ser Arg Arg Gly Pro Asp Ala Val Ala
 304 225 230 235 240
 307 Ala Pro Pro Gly Gly Thr Glu Arg Arg Pro Lys Gly Leu Gly Pro Glu
 308 245 250 255
 311 Arg Ser Ala Gly Pro Gly Gly Ala Glu Ala Glu Pro Leu Pro Thr Gln
 312 260 265 270
 315 Leu Asn Gly Ala Pro Gly Glu Pro Ala Pro Ala Gly Pro Arg Asp Thr
 316 275 280 285
 319 Asp Ala Leu Asp Leu Glu Glu Ser Ser Ser Ser Asp His Ala Glu Arg
 320 290 295 300
 323 Pro Pro Gly Pro Arg Arg Pro Glu Arg Gly Pro Arg Gly Lys Gly Lys
 324 305 310 315 320
 327 Ala Arg Ala Ser Gln Val Lys Pro Gly Asp Ser Leu Pro Arg Arg Gly
 328 325 330 335
 331 Pro Gly Ala Thr Gly Ile Gly Thr Pro Ala Ala Gly Pro Gly Glu Glu
 332 340 345 350
 335 Arg Val Gly Ala Ala Lys Ala Ser Arg Trp Arg Gly Arg Gln Asn Arg
 336 355 360 365
 339 Glu Lys Arg Phe Thr Phe Val Leu Ala Val Val Ile Gly Val Phe Val
 340 370 375 380
 343 Val Cys Trp Phe Pro Phe Phe Thr Tyr Thr Leu Thr Ala Val Gly
 344 385 390 395 400
 347 Cys Ser Val Pro Arg Thr Leu Phe Lys Phe Phe Trp Phe Gly Tyr
 348 405 410 415
 351 Cys Asn Ser Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn His Asp
 352 420 425 430
 355 Phe Arg Arg Ala Phe Lys Lys Ile Leu Cys Arg Gly Asp Arg Lys Arg
 356 435 440 445
 359 Ile Val
 360 450
 363 <210> SEQ ID NO: 5
 364 <211> LENGTH: 22
 365 <212> TYPE: DNA

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366 <213> ORGANISM: Homo sapiens
368 <400> SEQUENCE: 5
369 tttacccatc ggctctccct ac 22
372 <210> SEQ ID NO: 6
373 <211> LENGTH: 23
374 <212> TYPE: DNA
375 <213> ORGANISM: Homo sapiens
377 <400> SEQUENCE: 6
378 gagacaccag gaagagggtt tgg 23
381 <210> SEQ ID NO: 7
382 <211> LENGTH: 20
383 <212> TYPE: DNA
384 <213> ORGANISM: Homo sapiens
386 <400> SEQUENCE: 7
387 tcgtcatcat cgccgtgttc 20
390 <210> SEQ ID NO: 8
391 <211> LENGTH: 23
392 <212> TYPE: DNA
393 <213> ORGANISM: Homo sapiens
395 <400> SEQUENCE: 8
396 cgtaccatt ctggtcgttg atc 23
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400 <211> LENGTH: 24
401 <212> TYPE: DNA
402 <213> ORGANISM: Homo sapiens
404 <400> SEQUENCE: 9
405 gccatcatca tcaccgtgtg ggtc 24
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409 <211> LENGTH: 23
410 <212> TYPE: DNA
411 <213> ORGANISM: Homo sapiens
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414 ggctcgctcg ggccttgcct ttg 23
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418 <211> LENGTH: 22
419 <212> TYPE: DNA
420 <213> ORGANISM: Homo sapiens
422 <400> SEQUENCE: 11
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427 <211> LENGTH: 23
428 <212> TYPE: DNA
429 <213> ORGANISM: Homo sapiens
431 <400> SEQUENCE: 12
432 tgaccgggtt caacgagctg ttg 23
435 <210> SEQ ID NO: 13
436 <211> LENGTH: 23
437 <212> TYPE: DNA
438 <213> ORGANISM: Homo sapiens

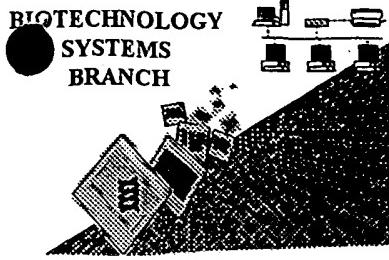
RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/20/2002
PATENT APPLICATION: US/09/636,259B TIME: 11:38:47

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\11192002\I636259B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; N Pos. 7



CRF Problem Report

The Scientific and Technical Information Center (STIC) experienced a problem when processing the following computer readable form (CRF):

Application Serial Number: 09/636,259
Filing Date: 8/10/2002
Date Processed by STIC: 2/7/2002

STIC Contact: Mark Spencer, 703-308-4212

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Nature of Problem:

The CRF (was):

- (circle one) Damaged or Unreadable (for Unreadable, see attached)
 Blank (no files on CRF) (see attached)
 Empty file (filename present, but no bytes in file) (see attached)
 Virus-infected. Virus name: _____ The STIC will not process the CRF.
 Not saved in ASCII text
 Sequence Listing was embedded in the file. According to Sequence Rules,
submitted file should **only** be the Sequence Listing.
 Did not contain a Sequence Listing. (see attached sample)
 Other:

PLEASE USE THE CHECKER VERSION 3.1 PROGRAM TO REDUCE ERRORS.

SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
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Revised 01/29/2002